GENERAL CODE DATA

Project

UNG Draper Complex New Recruiter Storage Building
DFCM Project No. 08275480
Phase: Construction Documents

Utah Statewide Codes (with amendments)

2006 International Building Code	2006 International Mechanical Code
2006 International Plumbing Code	2008 National Electrical Code
2006 International Energy Conservation Code	2006 International Fire Code
1994 ADA Accessibility Guidelines	2006 International Fuel Gas Code

Occupancy

Occupancy Classification: (Recruiting Equipment Storage)	S-1
Mixed Occupancy:	No
Incidental Uses:	None
Accessory Uses:	None

Area

Public Way/Open Space	Width
North	>30
East	>30
South	>30
West	>30

Qualifying Building Frontage (F):	200
Building Perimeter (P):	200
F/P:	1.00
Width (W):	30.00
W/30:	1.00
Frontage Increase (If):	75.00

Allowable Area	Multipliers	S-1
Tabular Area (At)		17500
Frontage Increase (If)	75.00	13125
Sprinkler Increase (Is)	0	0
Allowable Area (Aa)		30625

Actual Area

Actual Area - Building	2400

Actual area less that allowable area - OK

Height and Number of Stories

	S-1
Allowable Height	55
Actual Height	16
Allowable No. of Stories	3
Actual No. of Stories	1

Type of Construction

Type of Construction:	IIB

Fire-Resistance-Rated Construction

Fire-Resistance Rating Requirements for Building Elements (Based on Type of Construction)

Element	Hours	Test No.
Structural Frame	0	n/a
Exterior Bearing Walls	0	n/a
Interior Bearing Walls	0	n/a
Exterior Non-Bearing Walls and Partitions	0	n/a
Interior Non-Bearing Walls and Partitions	0	n/a
Floor Construction	0	n/a
Roof Construction	0	n/a

Fire-Resistance Rating Requirements for Exterior Walls (Based on Fire Separation Distance)

Location/Fire Separation Distance	Wall (Hours)	Wall Test No.	Unprotected Openings*	Door/Win (Hours)
North/>30	0	n/a	unlimited	0/0
East/>30	0	n/a	unlimited	0/0
South/>30	0	n/a	unlimited	0/0
West/>30	0	n/a	unlimited	0/0

*Unlimited unprotected openings allowed [Ref: IBC Table 704.8 footnote i]

Interior Finishes

Wall and Ceiling Finish Requirements	Requirement	Provided
Rooms and Enclosed Spaces:	Class C	n/a

Fire Protection Systems

	Requirement	Provided
Automatic Sprinkler System Required:	No	No
Standpipe System Required:	No	No
Fire Alarm System Required:	No	No

Means of Egress

Occupant Load

Occupant Load (2400/500=4.8)	5

Means of Egress	Requirement	Provided
Building Exits	1	1
Building Accessible Means of Egress	1	1
Egress Width (in.): 5 x 0.20 = 1.00	1	33
Maximum Common Path of Travel (ft) - S	100*	97
Maximum Travel Distance Building with One Exit (ft.) - S-1	200	97

*Group S allowed 100 ft if less than 30 occupants [Ref: IBC 1014.3 ex 2]

Accessibility

	Requirement	Provided
Accessible Entrances	60%	100%

Seismic and Wind

Geismic Design Category:	D
Design Wind Speed/Exposure:	90/C

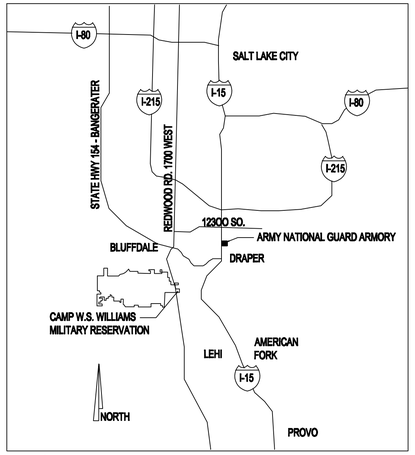
Plumbing Systems

Restroom facilities provided within 500 ft.

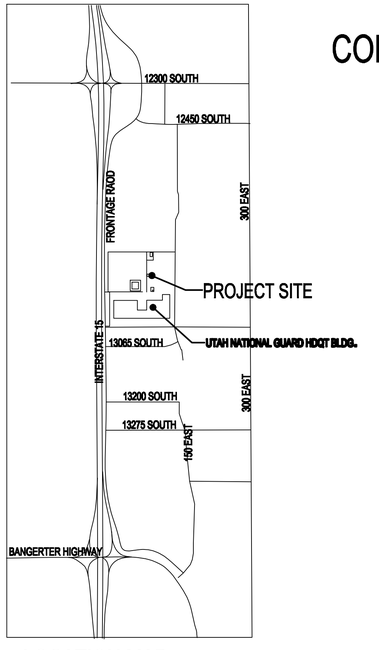
Deferred Submittals

Deferred Submittal	Section	Item	Est Date
Sectional Doors	083326	Structural Analysis	10/08

Remarks



VICINITY MAP



LOCATION MAP

APPROVALS:

Prime Agency _____ Date _____

DFCM _____ Date _____

APPROVAL DOES NOT RELIEVE A/E OF DESIGN LIABILITY

APPROVALS:

Prime Agency _____ Date _____

DFCM _____ Date _____

UTAH NATIONAL GUARD

RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD, DRAPER, UTAH

PROJECT No. 08275480

DATE: AUG 29, 2008

CONSTRUCTION DOCUMENTS

STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

DIVISION OF FACILITIES & CONSTRUCTION AND MANAGEMENT
4110 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84111
801.538.3018

INDEX OF DRAWINGS

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CONSULTANT INFORMATION

KEYED NOTES

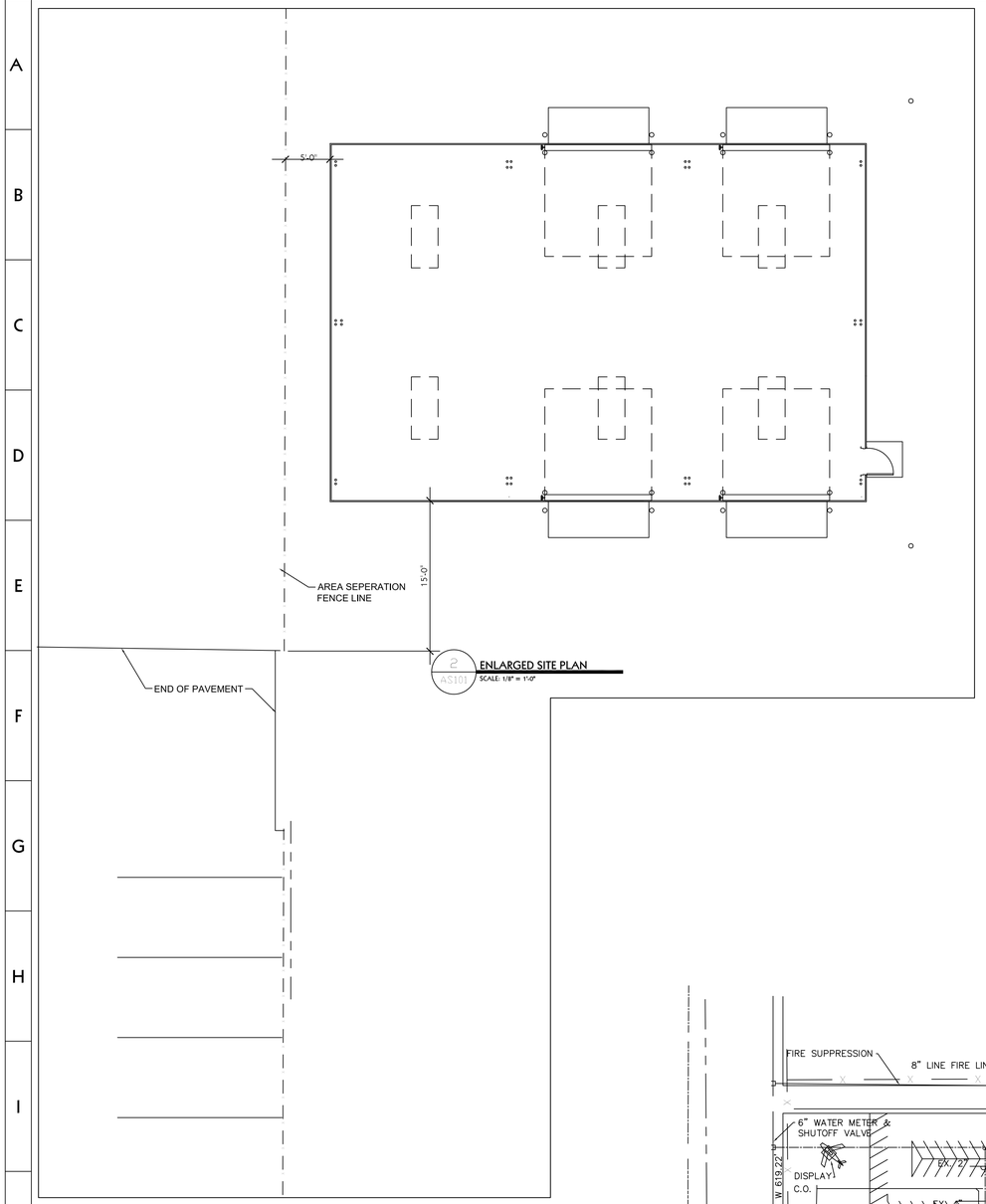
Utah National Guard
RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
DRAPER, UTAH

SHEET TITLE
COVER SHEET

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY JRA
CHECKED BY ERT
PROJECT NO. 08275480
DRAWING NO. GL001
DATE FEB 29, 2008

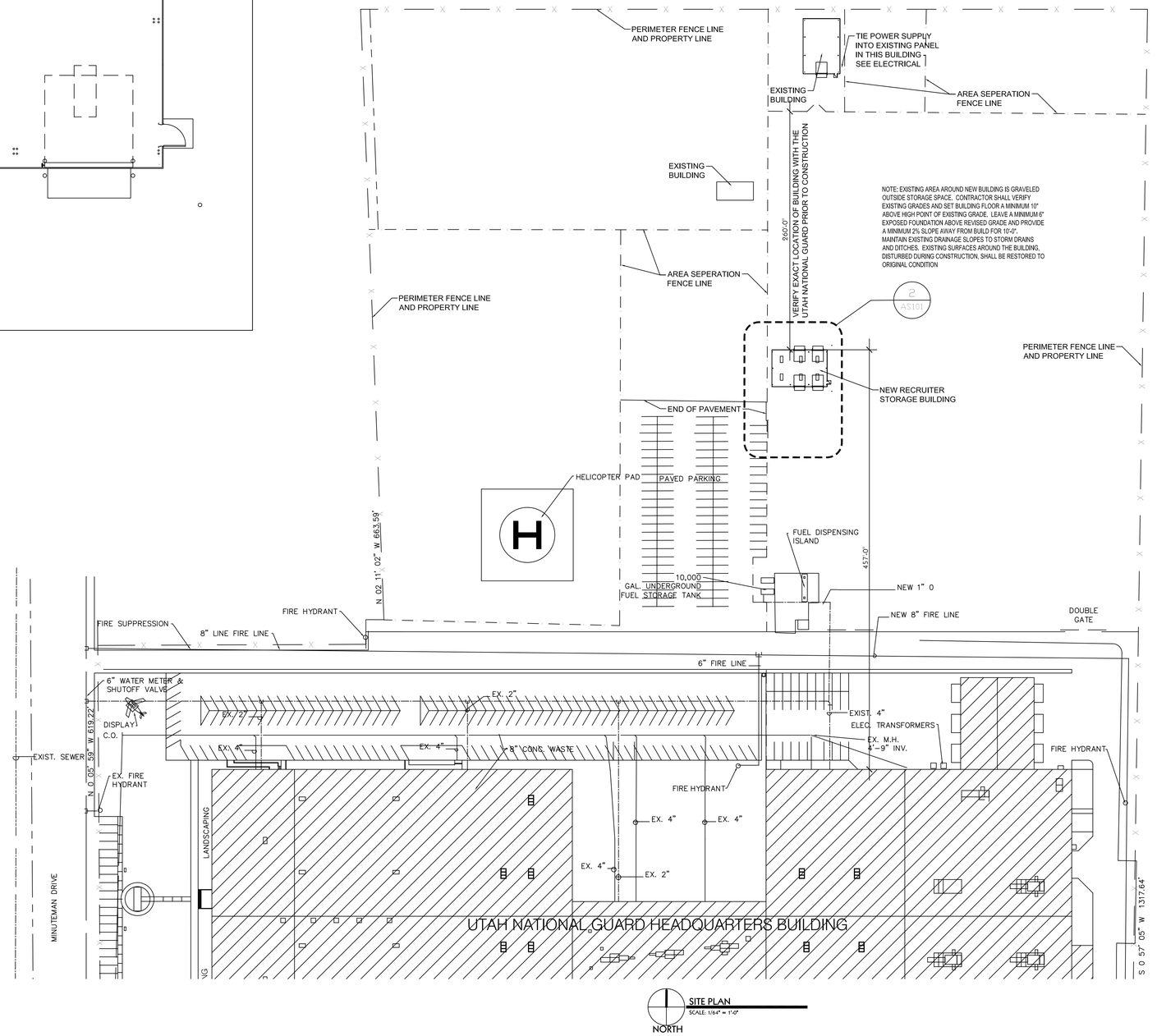
Utah National Guard - RECRUITER STORAGE BUILDING - DRAPER, UTAH



2 AS101

ENLARGED SITE PLAN

SCALE: 1/8" = 1'-0"



SITE PLAN

SCALE: 1/64" = 1'-0"

NORTH

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SHEET TITLE

SITE PLAN

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

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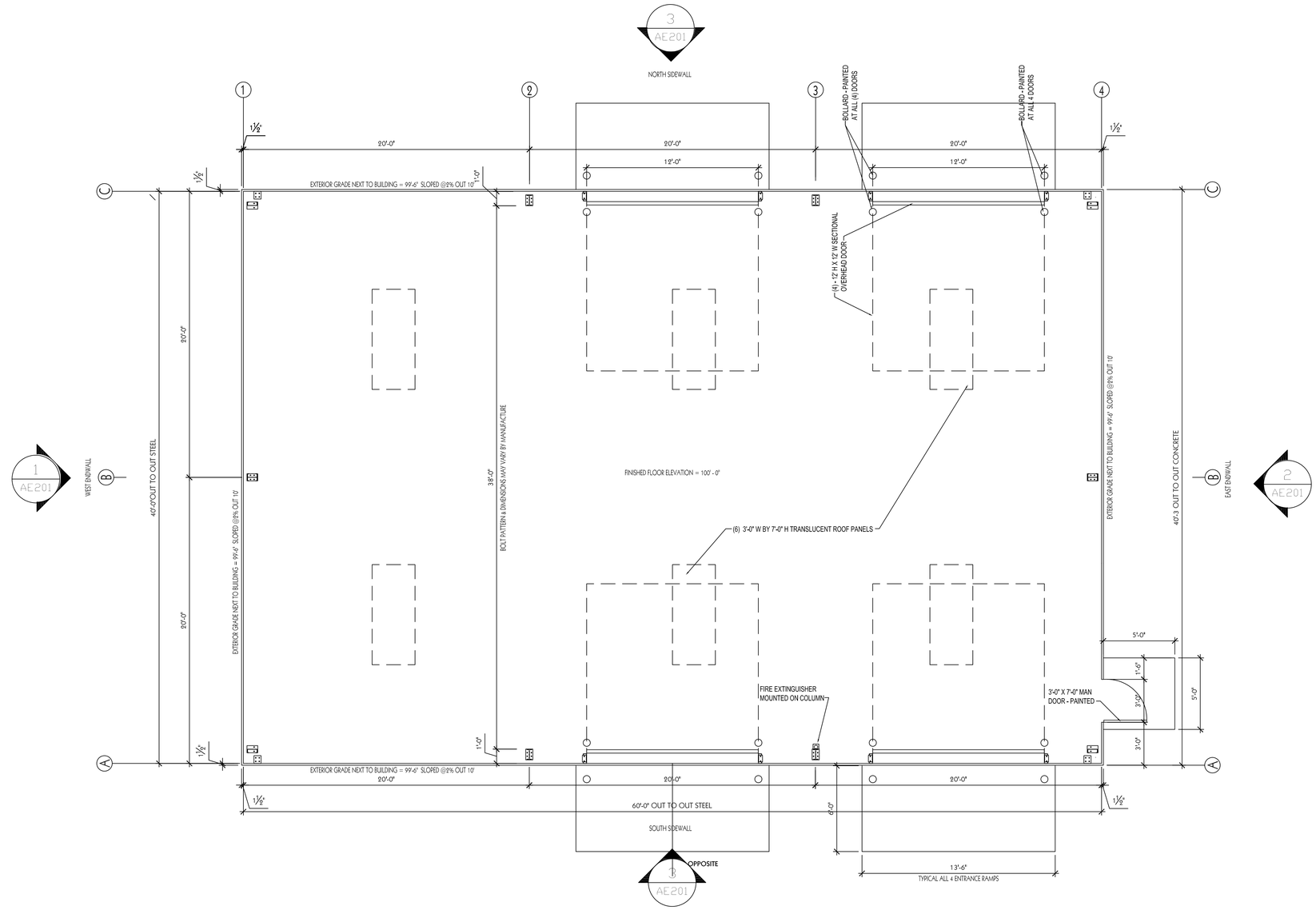
PROJECT NO.	08275480
DRAWING NO.	AS101
DATE	FEB. 29, 2008

Utah National Guard - RECRUITER STORAGE BUILDING - DRAPER, UTAH



FLOOR PLAN
SCALE: 1/4" = 1-0"

NORTH

NOTE: THE DRAWINGS ARE MEANT TO GIVE GENERAL PARAMETERS FOR THE PROPOSED STRUCTURE BUT MAY VARY SLIGHTLY BY MANUFACTURE. ALL BIDS SHOULD BE BASED ON THE BASIC STYLE, DIMENSIONS, & MATERIALS INDICATED ON THE SHEETS IN THESE DRAWINGS AND IN THE SPECIFICATION.

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SHEET TITLE
FLOOR PLN

REVISIONS	DATE	BY	DESCRIPTION
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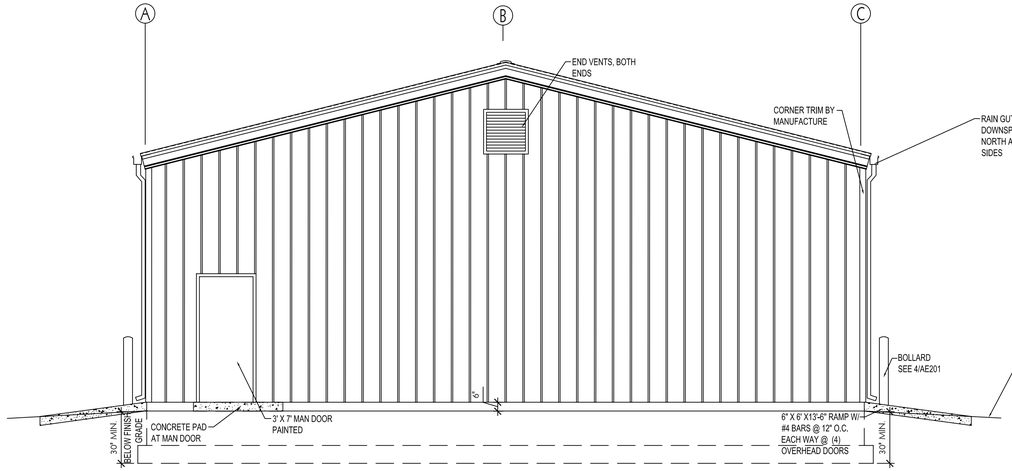
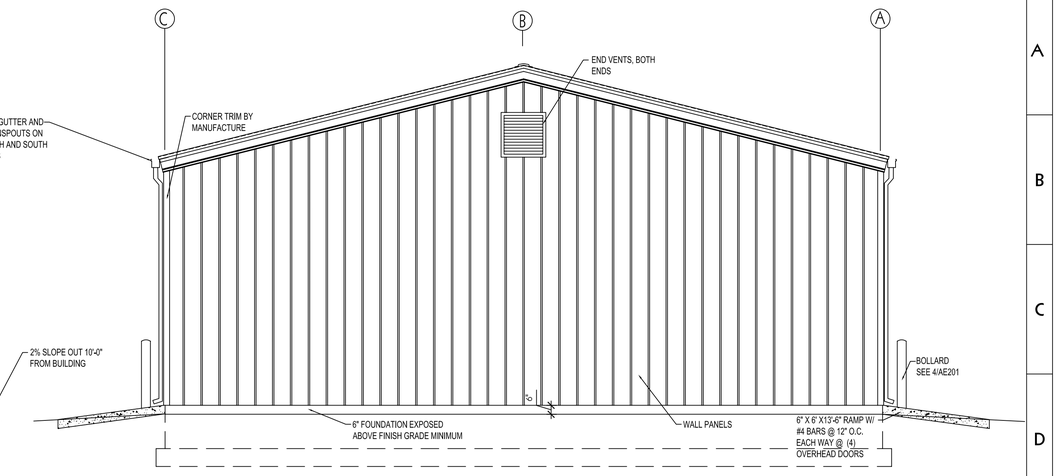
DRAWN BY JRA
CHECKED BY ERT
PROJECT NO. 08275480
DRAWING NO. AE101
DATE AUG 29, 2008

Utah National Guard - RECRUITER STORAGE BUILDING - DRAPER, UTAH



2 AE201 **EAST ELEVATION**
SCALE: 1/4" = 1-0"



1 AE201 **WEST ELEVATION**
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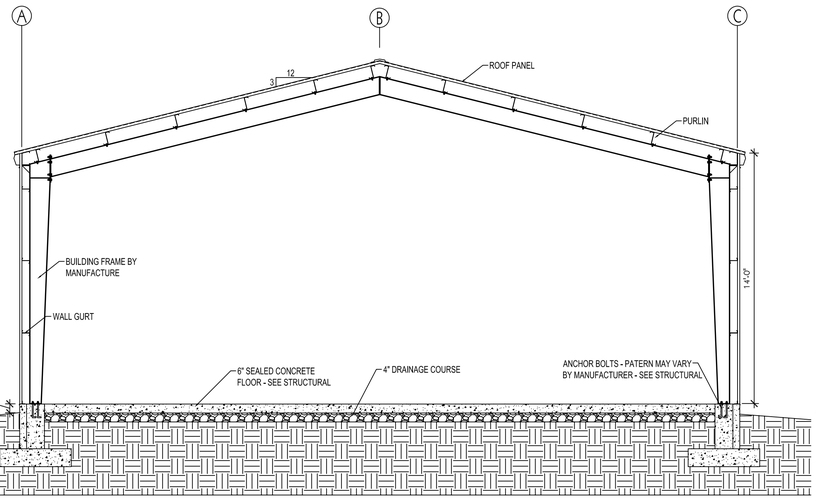

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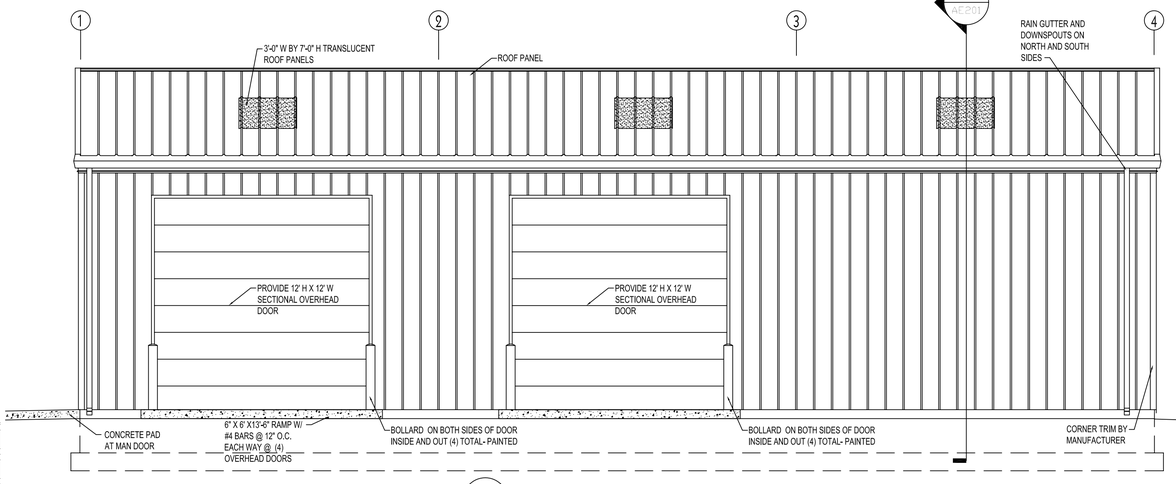
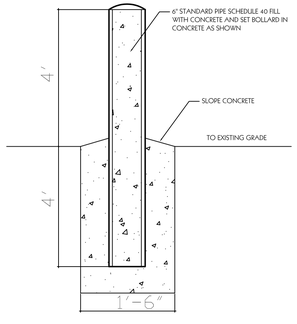


3 AE201 **NORTH ELEVATION** SOUTH ELEV. OPPOSITE
SCALE: 1/4" = 1-0"



5 AE201 **BOLLARD DETAIL**
SCALE: 3/4" = 1-0"

NOTE: THE DRAWINGS ARE MEANT TO GIVE GENERAL PARAMETERS FOR THE PROPOSED STRUCTURE BUT MAY VARY SLIGHTLY BY MANUFACTURE. ALL BIDS SHOULD BE BASED ON THE BASIC STYLE, DIMENSIONS, & MATERIALS INDICATED ON THE SHEETS IN THESE DRAWINGS AND IN THE SPECIFICATION.

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SHEET TITLE
ELEVATIONS

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: JRA	CHECKED BY: ERT
PROJECT NO.: 08275480	DRAWING NO.: AE201
DATE: AUG 29, 2008	

Utah National Guard - RECRUITER STORAGE BUILDING - DRAPER, UTAH

GENERAL

1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND OTHER ITEMS TO BE PLACES OR SET IN THE STRUCTURAL WORK.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.

3. THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISH STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

4. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

6. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS.

7. LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD-CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADINGS USED IN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE "DESIGN CRITERIA NOTES". DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS PROPERLY CONNECTED TOGETHER AND UNTIL ALL TEMPORARY BRACING IS IN PLACE.

8. ALL ASTM AND OTHER REFERENCES ARE PER THE LATEST EDITIONS OF THESE STANDARDS, UNLESS OTHERWISE NOTED. SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL. THE ENGINEER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPTS AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSION, ETC.

9. SUBMIT SHOP DRAWINGS IN THE FORM OF TWO SETS OF PRINTS AND ONE SET OF REPRODUCIBLE DRAWINGS TO BE USED AS SHOP DRAWINGS. AS A MINIMUM, SUBMIT THE FOLLOWING ITEMS FOR REVIEW:
   - 9.1. CONCRETE MIX DESIGN(S).
   - 9.2. REINFORCING STEEL SHOP DRAWINGS.

   OTHER SUBMITTALS MAY BE REQUIRED PER THE "SPECIAL INSPECTION" NOTES CONTAINED HEREIN.

10. CONTRACTORS SHALL VISIT THE SITE PRIOR TO BID TO ASCERTAIN CONDITIONS WHICH MAY ADVERSELY AFFECT THE WORK OR COST THEREOF.

DESIGN CRITERIA NOTES

1. THE INTENDED DESIGN STANDARDS AND/OR CRITERIA ARE AS FOLLOWS:

1.1.	GENERAL CODE	2006 INTERNATIONAL BUILDING CODE
1.2.	CONCRETE	ACI 318-05
1.3.	FOUNDATIONS	SOILS INVESTIGATION AND REPORT By: AMEC EARTH & ENVIRONMENTAL #4-817-004948.

2. REFER TO BUILDING MFR FOR DESIGN GRAVITY DEAD LOADS USED IN THE DESIGN OF THIS STRUCTURE.

3. DESIGN GRAVITY LIVE LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE AS FOLLOWS:

3.1.	ROOF - TYPICAL	20 psf
3.2.	ROOF - SNOW	36 psf

4. DESIGN LATERAL LOAD LIVE LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE AS FOLLOWS:

4.1.	SEISMIC LOADS	
4.1.a.	SHORT PERIOD MAPPED SPECTRAL ACCELERATION	Ss = 1.79
4.1.b.	5% DAMPED DESIGN SPECTRAL RESPONSE ACCELERATION	Sds = 2/3 * Ie/R
4.1.c.	SHORT PERIOD SITE COEFFICIENT	Fa = 1.0
4.1.d.	SOIL SITE CLASS	D
4.1.e.	BUILDING SEISMIC DESIGN CATEGORY	D
4.1.f.	W	STRUCTURE DEAD LOADS
4.1.g.	BASE SHEAR	V = Cs*W

5. WIND LOADS

5.0.a.	WIND VELOCITY (fastest mile wind speed)	90 mph
5.0.b.	EXPOSURE	C
5.0.c.	WIND IMPORTANCE FACTOR	1.0

FOUNDATIONS

1. ALL FOOTINGS HAVE BEEN DESIGNED BASED UPON AN ASSUMED SOIL BEARING PRESSURE OF 1,500 psf. ALL FOOTINGS SHALL BEAR ON UNDISTURBED, FIRM NATURAL SOIL OR COMPACTED FILL. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER/ TESTING AGENCY PRIOR TO POURING FOUNDATION CONCRETE.

2. TOP OF FOOTING ELEVATION SHALL BE AS SHOWN ON THE FOUNDATION PLAN. THESE ELEVATIONS ARE A MAXIMUM AND SHALL BE LOWERED AS REQUIRED TO OBTAIN THE REQUIRED DESIGN BEARING PRESSURE.

3. THE BOTTOM OF ANY FOOTINGS EXPOSED TO THE FREEZE THAW CYCLE SHALL BE PLACED A MINIMUM OF 30 INCHES BELOW GRADE FOR FROST PROTECTION.

4. NO UNBALANCED BACK FILLING SHALL BE DONE AGAINST FOUNDATION WALLS UNLESS WALLS ARE SECURELY BRACED AGAINST OVERTURNING, EITHER BY TEMPORARY BRACING OR BY PERMANENT CONSTRUCTION.

5. PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH ANY EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES.

CONCRETE

1. CONCRETE SHALL HAVE THE FOLLOWING MATERIALS UNLESS NOTED OTHERWISE:

1.1.	NORMAL WEIGHT AGGREGATE	ASTM C-33.
1.2.	REINFORCING STEEL	ASTM A-615,
1.2.a.	GRADE 60	Fy = 60 ksi.
1.2.b.	GRADE 40	Fy = 40 ksi. (field bent dowels with spacings reduced by 1/3.)
1.3.	WELDED WIRE FABRIC (WWF)	ASTM A-185.
1.4.	DEFORMED BAR ANCHORS (DBA)	ASTM A-496.
1.5.	HEADED STUD ANCHORS (HAS)	ASTM A-108.

2. ANCHOR BOLTS:

2.1.	GRAVITY BOLTS	ASTM A-307.
2.2.	HEAVY HEX NUTS & WASHERS	ASTM A-563.

3. ADMIXTURES:

3.1.	AIR ENTRAINMENT	ASTM C-260 (provide as specified in ACI 318)
3.2.	CEMENT TYPE (I OR II)	ASTM C-150
3.3.	CALCIUM CHLORIDE	NOT PERMITTED.
3.4.	ALUMINUM PRODUCTS	NOT PERMITTED

4. CONCRETE SHALL HAVE THE FOLLOWING COMPRESSIVE STRENGTHS:

CONCRETE	MINIMUM f'c (28 DAYS)	SLUMP	W/C RATIO
FOOTINGS	3000 psi	3" TO 5"	0.50
FOUNDATIONS	3000 psi	3" TO 5"	0.46
SLAB-ON-GRADE	3500 psi	3" TO 5"	0.50
CONCRETE NOT NOTED	3000 psi	3" TO 5"	0.50

5. AT THE CONTRACTOR'S OPTION, AN APPROVED ADMIXTURE MAY BE USED TO PRODUCE FLOWABLE CONCRETE. MAXIMUM SLUMP SHALL NOT EXCEED 8 INCHES. THE CONTRACTOR SHALL SUBMIT TEST RESULTS OF THE PROPOSED CONCRETE MIXES ALONG WITH THE MANUFACTURER'S TECHNICAL DATA FOR APPROVAL PRIOR TO POURING CONCRETE.

6. THE CONTRACTOR IS ALLOWED TO HAVE ONLY ONE TYPE OF CONCRETE ON THE JOB SITE AT ONE TIME.

7. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS". HOT WEATHER CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 305.

8. COLD WEATHER CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 306.

9. WELDING OF REINFORCING BARS IS NOT PERMITTED. REBAR SHALL NOT BE SUBSTITUTED FOR ANY OTHER TYPE OF REINFORCEMENT. SUBSTITUTION OF REINFORCING BARS OF ANY KIND SHALL BE AT THE ENGINEER OF RECORD'S WRITTEN CONSENT.

10. ALL REINFORCING STEEL SHALL BE SET AND TIED IN PLACE PRIOR TO POURING OF CONCRETE, EXCEPT THAT VERTICAL DOWELS FOR MASONRY WALL REINFORCING MAY BE "FLOATED" IN PLACE. DO NOT FIELD BEND BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE UNLESS SPECIFICALLY INDICATED OR APPROVED BY THE ENGINEER OF RECORD.

11. REINFORCING STEEL, INCLUDING HOOKS AND BENDS, SHALL BE DETAILED IN ACCORDANCE WITH ACI 315. ALL REINFORCING STEEL INDICATED AS BEING CONTINUOUS (CONT.) SHALL BE LAPPED WITH A TYPE 2 LAP SPLICE UNLESS OTHERWISE NOTED. ALL WELDED WIRE FABRIC SHALL LAP AT LEAST ONE FULL MESH.

12. UNLESS NOTED OTHERWISE, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

12.1.	CONCRETE EXPOSED TO EARTH OR WEATHER:	
12.1.a.	#6 THROUGH #18 BARS	2"
12.1.b.	#5 BAR, W31 OR D31 WIRE & SMALLER	1 1/2"
12.2.	CONCRETE NOT EXPOSED TO THE EARTH OR WEATHER:	
12.2.a.	WALLS, ELEVATED SLABS (JOISTS)	3/4"
12.2.b.	BEAMS AND COLUMNS	1 1/2"
12.3.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO THE EARTH:	3"

13. BAR SUPPORTS AND HOLDING BARS SHALL BE PROVIDED FOR ALL REINFORCING STEEL TO INSURE MINIMUM CONCRETE COVER. BAR SUPPORTS SHALL BE PLASTIC TIPPED OR STAINLESS STEEL.

14. UNLESS OTHERWISE APPROVED, ALL WELDED WIRE FABRIC SHALL BE BLOCKED INTO THE POSITION INDICATED WITH PRECAST CONCRETE BLOCKS HAVING A COMPRESSIVE STRENGTH EQUAL TO THAT OF THE SLAB.

15. FORM WORK SHALL COMPLY WITH THE REQUIREMENTS OF ACI STANDARD PUBLICATION #347 AND SHALL REMAIN IN PLACE UNTIL CONCRETE HAS OBTAINED AT LEAST 90% OF ITS 28-DAY COMPRESSIVE STRENGTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAIL PLACEMENT AND REMOVAL OF ALL FORM WORK, SHORING AND RE-SHORING.

16. SLABS TO BE PERMANENTLY EXPOSED TO WEATHER SHALL BE AIR ENTRAINED AS SPECIFIED ABOVE.

17. CONSTRUCTION AND CONTROL JOINTS SHALL BE INSTALLED IN THE SLABS ON GRADE SO THAT THE LENGTH TO WIDTH RATIOS IS NOT MORE THAN 1.25 TO 1. CONTROL JOINTS SHALL BE COMPLETED WITHIN 12 HOURS OF THE PLACEMENT OF THE CONCRETE. CONTROL JOINTS SHALL BE CUT INTO THE SLABS OR TOOLED IN THE SLABS A DEPTH OF 1/4 THE DEPTH OF THE SLAB. INSTALL JOINTS IN THE SLABS ON GRADE AT A SPACING NOT TO EXCEED 30 TIMES THE SLAB THICKNESS OF THE SLAB IN ANY DIRECTION UNLESS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS. CONSTRUCTION JOINTS SHALL BE LIMITED TO A SPACING OF NOT MORE THAN 125'-0" IN ANY DIRECTION.

18. HORIZONTAL WALL REINFORCING BARS SHALL TERMINATE IN A 90-DEGREE STANDARD HOOK WITH A 6 BAR DIAMETER LENGTH EXTENSION. AT INTERSECTING WALLS, PROVIDE CORNER BARS OF THE SAME BAR SIZE AND SPACING AS THE HORIZONTAL WALL REINFORCEMENT.

19. VERTICAL WALL REINFORCING BARS SHALL HAVE MATCHING DOWELS THAT CONSIST OF A 90 DEGREE HOOK EMBEDDED WITHIN 4" OF THE BOTTOM OF THE FOOTING. THE DOWEL SHALL EXTEND 20" INTO THE FOOTING.

20. REFER TO THE "SPECIAL INSPECTION" SECTION OF THE GENERAL STRUCTURAL NOTES FOR ANY INSPECTION REQUIREMENTS.

PRE-ENGINEERED METAL BUILDINGS

1. THE DESIGN, FABRICTION, AND ERECTION OF AL PREFABRICATED ELEMENTS WITH THEIR ASSOCIATED HARDWARE SHALL COMPLY WITH THE LATEST REQUIREMENTS OF THE IBC, AISC, SDI, AND AISI.

2. PRIOR TO FABRICTION AND INSTALLATION OF ANCHOR BOLTS, THE METAL BUILDING SUPPLIER SHALL SUBMIT COMPLETE SHOP DRAWINGS AND CALCULATIONS INCLUDING REACTIONS BEARING THE STAMP OF A REGISTERED PROFFESIONAL ENGINEER, LICENSED IN THE SAME STATE AS THE BUILDING IS TO BE BUILT.

3. DO NOT MODIFY ANY STRUCTURAL ELEMENT OF THE PREFABRICATED METAL BUILDING WITHOUT WRITTEN CONSENT AND DIRECTION FROM THE MANUFACTURER. SEND COPIES OF THE CONSENT AND MODIFICATIONS TO THE ARCHITECT AND ENGINEER.

4. ALL OF THE ANCHOR BOLTS AND BASE PLATE CONNECTION OF THE PREFABRICATED COLUMNS, AND MISCELLANEOUS FRAMING MEMBERS TO THE FOUNDATIONS, SHALL BE OF THE NUMBER, MATERIAL, DIAMETER AND LAYOUT SHOWN IN THE PREFABRICATED METAL BUILDING DESIGNER/SUPPLIER/MANUFACTURERS DRAWINGS. THE DEPTH OF EMBEDMENT FOR THE ANCHOR BOLTS AND ANY OTHER MODIFICATIONS REQUIRED ARE SHOWN IN THESE STRUCTURAL CONTRACT DRAWINGS.

5. THE FOUNDATION PLAN AND ASSOCIATED FOUNDATION DETAILS ON SHEETS SE101, SE501, AND SE601 ARE BASED SOLELY UPON COLUMN AND WALL LOADS PROVIDED FOR THEIR DESIGN. FARLEY ENGINEERING llc. IS RESPONSIBLE ONLY FOR SUPPORTING THE LOADS PROVIDED BY THE PREFABRICTED BUILING MANUFACTURER AND ACCEPTS NO RESPONSIBILITY FOR THE DESIGN OF MEMBERS AND CONNECTIONS OF THE SUPERSTRUCTURE.

6. COORDINATE TESTING & SPECIAL INSPECTIONS AND REQUIRED SUBMITTALS WITH THE PROJECT SPECIFICATIONS.

SPECIAL INSPECTION

1. THE FOLLOWING ITEMS SHALL BE SPECIAL INSPECTED:
   - 1.1. BOLTS INSTALLED IN CONCRETE ______ IBC SECTION 1704.4
   - 1.2. METAL BUILDING STRUCTURAL STEEL ______ REFER TO SPECIFICATIONS
   - 1.3. CONCRETE PLACEMENTS PER ______ IBC SECTION 1704.4
2. THE SPECIAL INSPECTOR SHALL BE AN INDEPENDENT AGENCY HIRED BY THE OWNER UNLESS SPECIFICALLY INSTRUCTED OTHERWISE BY THE BUILDING OFFICIAL. THE CONTRACTOR SHALL COOPERATE IN EVERY WAY WITH THE INSPECTOR AND SHALL BE RESPONSIBLE FOR COORDINATING THE INSPECTIONS.

3. THE SPECIAL INSPECTIONS ARE REPAIRED BY THE IBC CODE SECTION 1704.

MARKS AND ABBREVIATIONS

AB — ANCHOR BOLT
ACI — AMERICAN CONCRETE INSTITUTE
AISC — AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT — ALTERNATE
ARCH — ARCHITECT
ASTM — AMERICAN SOCIETY OF TESTING MATERIALS
AWSA — AMERICAN WELDING SOCIETY

BLDG — BUILDING
BLW — BELOW
BRG — BEARING
BTWN — BETWEEN

C.J. — CONST. OR CONTROL JOINT
COL — COLUMN
CONC — CONCRETE
CONT — CONTINUOUS
CP-X — CONCRETE PIER MARK
CW-X — CONCRETE WALL MARK

DBL — DOUBLE
DET — DETAIL
DIA — DIAMETER
DIM — DIMENSION
DWG — DRAWING
DWL — DOWEL

EA — EACH
E.F. — EACH FACE
E.J. — EXPANSION JOINT
ELEV — ELEVATION
EQ — EQUAL
E.W. — EACH WAY
EXP — EXPANSION
EXT — EXTERIOR

FC-X — FOOTING CONTINUOUS MARK
FND — FOUNDATION
FS-X — SQUARE FOOTING MARK
FTG — FOOTING

GA — GAUGE
GAL — GALVANIZED
GR — GRADE
GSN — GENERAL STRUCTURAL NOTES

HORIZ — HORIZONTAL
ICBO — INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
I.F. — INTERIOR FACE
IN. — INCH
INT — INTERIOR

JST — JOIST

K — KIP = 1000 POUNDS
KLF — KIPS PER LINEAL FOOT
KSF — KIPS PER SQUARE FOOT

LBS — POUNDS
LF — LINEAL FOOT

MAX — MAXIMUM
MIN — MINIMUM
MISC — MISCELLANEOUS

NTS — NOT TO SCALE

O.C. — ON CENTER
O.F. — OUTSIDE FACE
OPP — OPPOSITE

PL — PLATE
PLF — POUNDS PER LINEAL FOOT
PSF — POUNDS PER SQUARE FOOT
PSI — POUNDS PER SQUARE INCH

REINF — REINFORCING
REQ'D — REQUIRED

SHT — SHEET
SI — SPECIAL INSPECTION
SIM — SIMILAR
SOG — SLAB ON GRADE
SQ — SQUARE
STD — STANDARD
STIFF — STIFFENER
STL — STEEL
STR — STRUCTURAL

T&B — TOP AND BOTTOM
TEMP — TEMPERATURE
T.O. — TOP OF
TOC — TOP OF CONCRETE
TOD — TOP OF DECK
TOF — TOP OF FOOTING
TOW — TOP OF WALL
TYP — TYPICAL

UNO — UNLESS NOTED OTHERWISE

VERT — VERTICAL

W/ — WITH
WWF — WELDED WIRE FABRIC

MARK	WIDTH	LENGTH	THICKNESS	CROSSWISE REINFORCING				LENGTHWISE REINFORCING				REMARKS
				NO.	SIZE	LENGTH	SPACE	NO.	SIZE	LENGTH	SPACE	
FC1.5	1'-6"	CONT.	12"	NONE REQUIRED				3	#4	CONT.	6"	
FS2.5	2'-6"	2'-6"	12"	3	#5	2'-0"	12"	3	#5	2'-0"	12"	
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	15"	3	#5	2'-6"	15"	
FS3.5	3'-6"	3'-6"	12"	3	#5	3'-0"	18"	3	#5	3'-0"	18"	
FS4.5	4'-6"	4'-6"	12"	4	#5	4'-0"	16"	4	#5	4'-0"	16"	T & B
FS5.5	5'-6"	5'-6"	12"	5	#5	5'-0"	15"	5	#5	5'-0"	15"	T & B

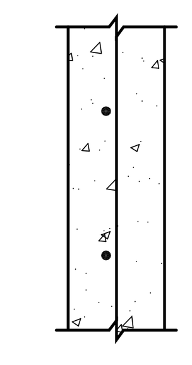
1. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER UNLESS NOTED OTHERWISE.
2. TOP REINFORCING, WHERE SPECIFIED, SHALL BE PLACE IN THE TOP OF THE FOOTING WITH 2" CLEAR CONCRETE COVER.
3. THE SCHEDULED FOOTINGS ARE NOT NECESSARILY ALL USED.
4. FTS-THICKENED SLAB FOOTING.
   FC-CONTINUOUS FOOTING.
   FS-SQUARE FOOTING.

1 CONCRETE FOOTING SCHEDULE

NO SCALE

FTS SCHED 1.5 PSF-3.0 PSI.DWG

MARK	THICKNESS	f'c psi	REINFORCING			TYPE	COMMENTS
			VERTICAL	HORIZONTAL	TOP AND BOTTOM		
CW-1	8"	3000	#4 AT 16"oc.	#4 AT 12"oc.	(2) #5 x CONT.	A	



'A'

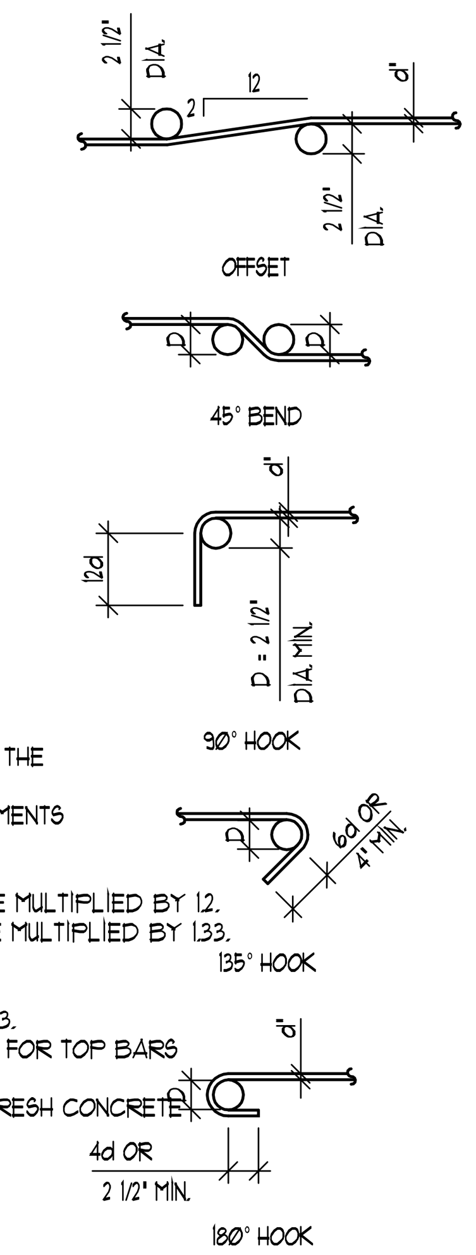
2 CONCRETE WALL SCHEDULE

NO SCALE

02026 S30

BAR SIZE	f'c = 3000 PSI				f'c = 4000 PSI				f'c = 5000 PSI				f'c = 6000 PSI			
	REGULAR		TOP		REGULAR		TOP		REGULAR		TOP		REGULAR		TOP	
	CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS		CLASS	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	13"	17"	17"	21"	12"	16"	16"	21"	12"	16"	16"	21"	12"	16"	16"	21"
#4	18"	24"	24"	31"	15"	19"	19"	25"	14"	19"	19"	24"	13"	17"	17"	22"
#5	22"	29"	29"	38"	19"	25"	25"	33"	17"	22"	22"	29"	16"	21"	21"	27"
#6	27"	36"	36"	46"	24"	31"	31"	40"	21"	28"	28"	36"	20"	25"	25"	33"
#7	39"	51"	51"	66"	34"	44"	44"	56"	30"	39"	39"	51"	27"	35"	35"	46"
#8	49"	64"	64"	82"	42"	55"	55"	71"	38"	49"	49"	64"	35"	45"	45"	58"
#9	62"	80"	80"	104"	54"	70"	70"	90"	48"	62"	62"	81"	44"	57"	57"	74"
#10	78"	102"	102"	132"	68"	88"	88"	115"	61"	79"	79"	102"	56"	72"	72"	94"
#11	96"	125"	125"	162"	83"	108"	108"	141"	76"	97"	97"	126"	68"	88"	88"	115"

1. THESE NOTES SHALL BE USED FOR ALL SPLICES, UNLESS NOTED OTHERWISE.
2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASSES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.
3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE #2 ABOVE ARE MET.
4. TIES AND STIRRUPS SHALL NOT BE SPLICED.
5. a. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2.
   b. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
   c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
   d. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
6. FOR ALL LIGHTWEIGHT CONCRETE, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3.
7. FOR ALL EPOXY COATED BARS, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3 FOR TOP BARS AND 1.5 FOR REGULAR BARS.
8. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", IR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.



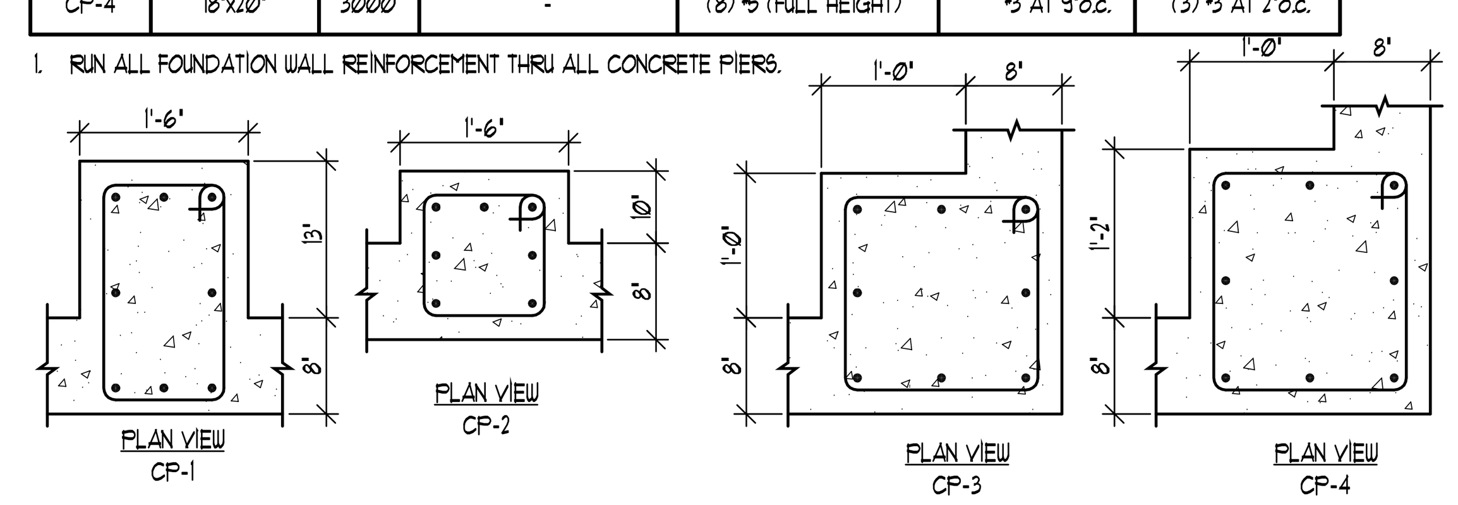
3 CONCRETE REBAR LAP SPLICE SCHEDULE

NO SCALE

ConcRebarLSSch.dwg

MARK	DIMENSIONS	f'c psi	VERTICAL REINFORCING	DOWELS TO FOOTING	TIE REINFORCING	TIES AT TOP
CP-1	18"x21"	3000	-	(8) #5 (FULL HEIGHT)	#3 AT 9"o.c.	(3) #3 AT 2"o.c.
CP-2	18"x18"	3000	-	(8) #5 (FULL HEIGHT)	#3 AT 9"o.c.	(3) #3 AT 2"o.c.
CP-3	20"x20"	3000	-	(8) #5 (FULL HEIGHT)	#3 AT 9"o.c.	(3) #3 AT 2"o.c.
CP-4	18"x20"	3000	-	(8) #5 (FULL HEIGHT)	#3 AT 9"o.c.	(3) #3 AT 2"o.c.

1. RUN ALL FOUNDATION WALL REINFORCEMENT THRU ALL CONCRETE PIERS.



4 CONCRETE PIER SCHEDULE

NO SCALE

HOUSE-041

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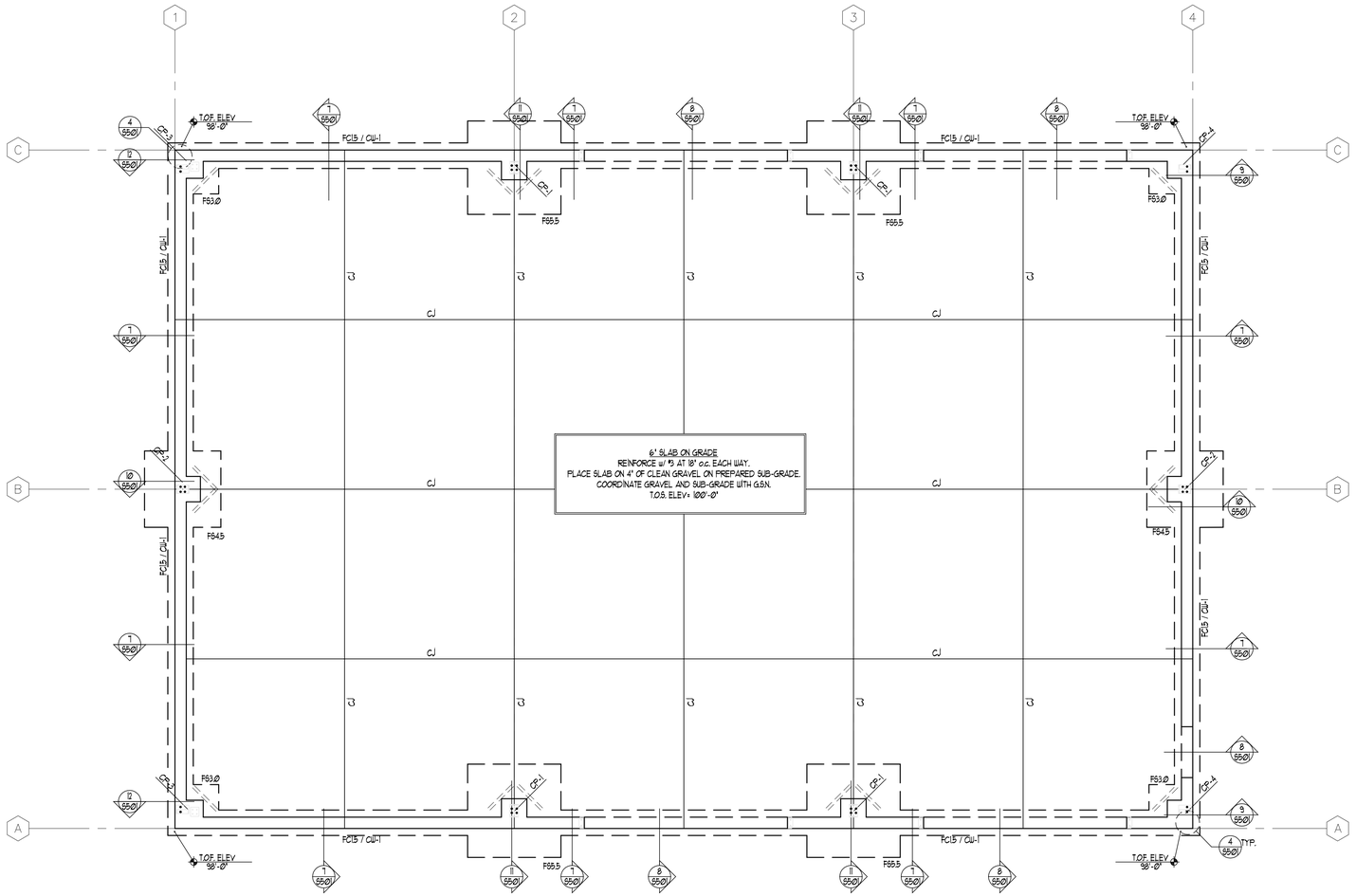
KEYED NOTES

Utah National Guard
RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
DRAPER, UTAH

SHEET TITLE
GENERAL STRUCTURAL NOTES

REVISIONS	DATE	BY	DESCRIPTION
△			
△			
△			
△			

DRAWN BY DMF	CHECKED BY DMF
PROJECT NO. 08043	DRAWING NO. S001
DATE AUGUST 29, 2008	



FOOTING & FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

FOOTING AND FOUNDATION PLAN NOTES

1. COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE ARCHITECTURAL DRAWINGS AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. SEE ARCHITECTURAL FOR ALL DIMENSIONS TO STEEL COLUMN.
4. SEE DETAILS (1/S501) AND (2/S501) FOR BURIED PIPES RUNNING PARALLEL AND PERPENDICULAR TO FOOTINGS.
5. SEE DETAIL 3/S501 FOR FILL BENEATH FOOTINGS AT SOFT SPOTS.
6. SEE 4/S501 FOR FOUNDATION WALL INTERSECTION DETAIL.
7. COORDINATE ALL SLAB CONTROL JOINTS AND CONSTRUCTION JOINTS WITH DETAIL 5/S501. SEE ARCHITECTURAL DRAWINGS FOR SPACINGS.
8. SEE DETAIL (6/S501) FOR REINFORCING AROUND MISCELLANEOUS OPENINGS IN CONCRETE WALLS.

LEGEND

- DETAIL MARK / SHEET NUMBER
- (2) #4 REBAR x 8'-0" LONG ADDED TO SLAB AT CENTER OF SLAB
- C.J. — INDICATES CONTROL/CONSTRUCTION JOINT. SEE DETAILS 5/S501
- CP-x — INDICATE CONCRETE PIER SEE SCHEDULE ON SHEET S001
- CW-x — INDICATES CONCRETE WALL TYPE. SEE SCHEDULE ON SHEET S001
- FC-x — INDICATES CONTINUOUS FOOTING SEE SCHEDULE ON SHEET S001
- FS-x — INDICATES SPOT FOOTING SEE SCHEDULE ON SHEET S001

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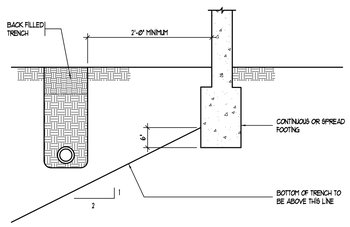
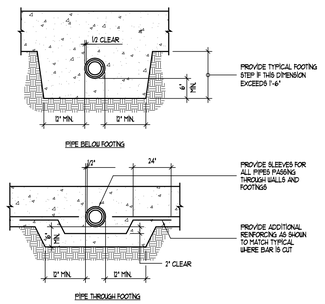
SHEET TITLE
FOUNDATION PLAN

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: DMF
CHECKED BY: DMF
PROJECT NO.: 08043
DRAWING NO.: S101
DATE: AUGUST 29, 2008



1 PIPE PARALLEL TO FOOTING DETAIL
NO SCALE



2 PIPE PERPENDICULAR TO FOOTING DETAIL
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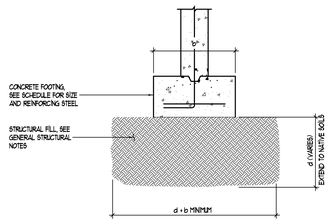

3 STRUCTURAL FILL DETAIL
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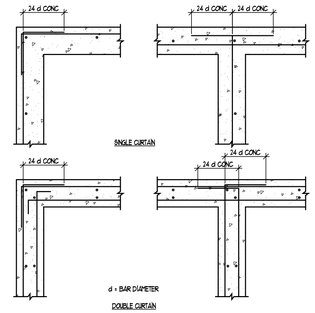
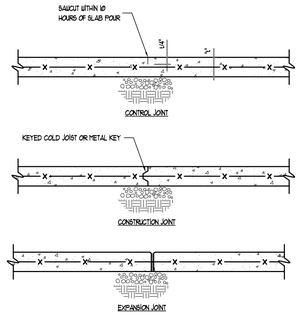
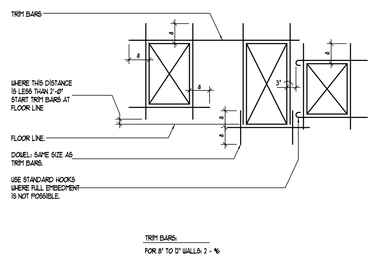
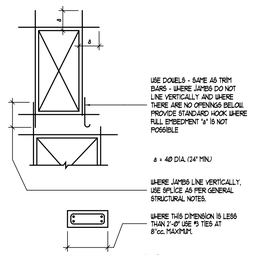


4 CONCRETE AND MASONRY WALL INTERSECTION REINFORCEMENT DETAIL
NO SCALE

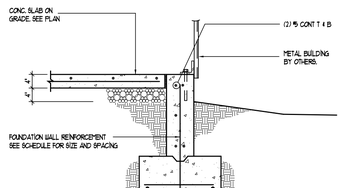


5 CONST./CONTROL JT. IN CONC. S.O.G.
NO SCALE

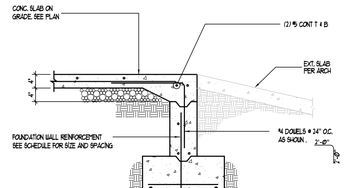




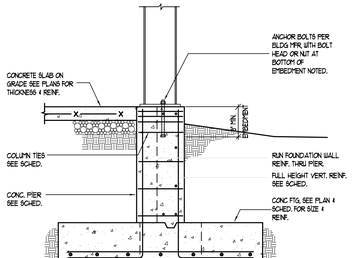
6 TYP. DETAILS OF TRIM BARS AROUND MISCELLANEOUS CONC. WALL OPENINGS. U.N.O.
NO SCALE



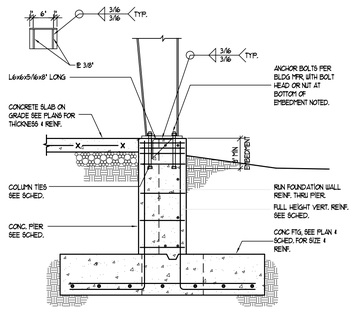
7 TYPICAL EXTERIOR FOUNDATION WALL DETAIL
NO SCALE



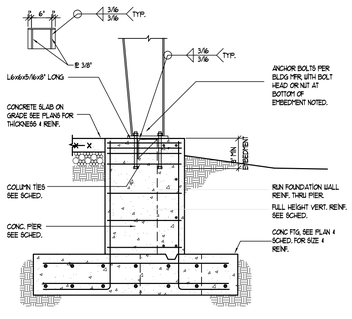
8 EXTERIOR FOUNDATION WALL AT OPENING
NO SCALE



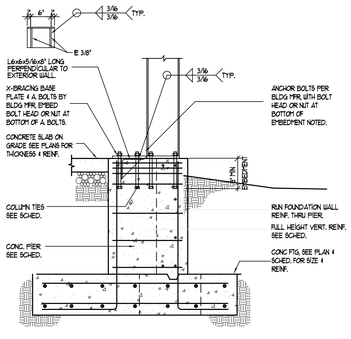
9 STEEL COLUMN TO CONCRETE PIER DETAIL
NO SCALE



10 STEEL COLUMN TO CONCRETE PIER DETAIL
NO SCALE



11 STEEL COLUMN TO CONCRETE PIER DETAIL
NO SCALE



12 STEEL COLUMN TO CONCRETE PIER DETAIL
NO SCALE

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KEYED NOTES

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RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
DRAPER, UTAH

SHEET TITLE
DETAILS

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: DMF
CHECKED BY: DMF
PROJECT NO.: 08043
DRAWING NO.: S501
DATE: AUGUST 29, 2008

SYMBOL LEGEND

SYMBOL	DESCRIPTION
REFERENCE AND LINE SYMBOLS	
A5 / E–501	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E–501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
A5 / E–201	ELEVATION OR SECTION INDICATOR, EXTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E–201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
A5 / E–201	ELEVATION OR SECTION INDICATOR, INTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E–201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
100	ROOM OR SPACE NUMBER.
1	KEYNOTE INDICATOR.
1	REVISION INDICATOR.
CU–1	EQUIPMENT INDICATOR.
	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING.
	BREAK, ROUND.
	NEW LINE: MEDIUM LINE.
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE.
WIRING METHODS	
	WIRING.
A–1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
1 A–1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT SCHEDULE. FOR BRANCH WIRING USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
1	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE–LINE DIAGRAM.
	JUNCTION BOX.
WIRING DEVICES	
	RECEPTACLE, DUPLEX: NEMA 5–20R.
WP	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WEATHERPROOF: NEMA 5–20R.
	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
X / $	SWITCH, SINGLE POLE ("x" INDICATES FIXTURES CONTROLLED).
ELECTRICAL POWER AND DISTRIBUTION	
225/3 "1H"	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE–LINE DIAGRAM).
225/3 "1H" 60/3	PANELBOARD WITH MAIN AND SUB FEED CIRCUIT BREAKER (ONE–LINE DIAGRAM).
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

1P	SINGLE POLE
1PH	SINGLE–PHASE
1WAY	ONE–WAY
2/C	TWO–CONDUCTOR
2WAY	TWO–WAY
3/C	THREE–CONDUCTOR
3PH	THREE–PHASE
3WAY	THREE–WAY
4OUT	QUADRUPLE RECEPTACLE OUTLET
4PDT	FOUR–POLE DOUBLE THROW
4PST	FOUR–POLE SINGLE THROW
4W	FOUR–WIRE
4WAY	FOUR–WAY
A	ABOVE COUNTER
AC	ARMORED CABLE
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
ALUM	ALUMINUM
AMP	AMPERE
ANN	ANNUNCIATOR
AP	ACCESS POINT (WIRELESS DATA)
AR	AS REQUIRED
ASC	AMPS SHORT CIRCUIT
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAGE
BB XFMR	BUCK–BOOST TRANSFORMER
C	CEILING MOUNTED
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCBA	CUSTOM COLOR AS SELECTED BY ARCHITECT
CCTV	CLOSED CIRCUIT TELEVISION
CFBA	CUSTOM FINISH AS SELECTED BY ARCHITECT
CF/CI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
CF/OI	CONTRACTOR FURNISHED/ OWNER INSTALLED
CKT	CIRCUIT
CM	CONSTRUCTION MANAGER
CND	CONDUIT
CO	CONVENIENCE OUTLET
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CU	COPPER
dBA	UNIT OF SOUND LEVEL
DPDT	DOUBLE POLE DOUBLE THROW
DS	DISCONNECT SWITCH
EA	EACH
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NONMETALLIC TUBING
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
EX	EXISTING
F	FURNITURE MOUNTED
FA	FIRE ALARM
FCP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METALCONDUIT
FOB	FREIGHT ON BOARD
FVNR	FULL VOLTAGE NON–REVERSING
FVR	FULL VOLTAGE REVERSING
G	GROUND
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
HD	HEAVY DUTY
HID	HIGH INTENSITY DISCHARGE
HOA	HAND–OFF–AUTOMATIC
HP	HORSE POWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE
HZ	HERTZ
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
IN/IS	INSULATED/ISOLATED
I/O	INPUT/OUTPUT
IR	INFRARED
J–BOX	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT AMPERE
kVAR	KILOVOLT AMPERE REACTIVE
kW	KILOWATT
kWh	KILOWATT HOUR
LED	LIGHT EMITTING DIODE
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
LFNC	LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
LPS	LOW PRESSURE SODIUM
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MC	METAL CLAD
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTION
MDP	MAIN DISTRIBUTION PANEL
MG	MOTOR GENERATOR
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFC	NATIONAL FIRE CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OCP	OVER CURRENT PROTECTION
OF/CI	OWNER FURNISHED/ CONTRACTOR INSTALLED
OF/OI	OWNER FURNISHED/ OWNER INSTALLED
OFP	OBTAIN FROM PLANS
OH DR	OVERHEAD (COILING) DOOR
OL	OVERLOAD
PB	PUSHBUTTON
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PT	POTENTIAL TRANSFORMER
PTZ	PAN/TILT/ZOOM
QTY	QUANTITY
R	REMOVE
RCP	REFLECTED CEILING PLAN
RMC	RIGID METAL CONDUIT
RNC	RIGID NONMETALLIC CONDUIT
RPM	REVOLUTIONS PER MINUTE
RR	REMOVE AND RELOCATE
SCA	SHORT CIRCUIT AMPS
SCBA	STANDARD COLOR AS SELECTED BY ARCHITECT
SF	SQUARE FOOT (FEET)
SFBA	STANDARD FINISH AS SELECTED BY ARCHITECT
SPDT	SINGLE POLE, DOUBLE THROW
SPEC	SPECIFICATION
SPST	SINGLE POLE, SINGLE THROW
S/S	START/STOP
ST	SINGLE THROW
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TL	TWIST LOCK
TP	TELEPHONE POLE
TP	TWISTED PAIR
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
TYP	TYPICAL
UF	UNDERFLOOR
UGND	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERE
VFC/VFD	VARIABLE FREQUENCY MOTOR CONTROLLER
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER

GENERAL ELECTRICAL NOTES

1. CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.

2. OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.

   A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.

   B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.

   C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.

3. EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.

4. SUBMITTALS: PROVIDE SUBMITTALS IN THREE RING BINDERS WITH JOB NAME, SUBCONTRACTOR, AND VOLUME ON THE BINDING. PREPARE TABS FOR EACH SPECIFICATION SECTION REQUIRING SUBMITTALS. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.

5. REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB–SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...

ELECTRICAL SHEET INDEX

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Utah National Guard
RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
DRAPER, UTAH

SHEET TITLE
Symbol Leg & Sheet Index

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: PSS
CHECKED BY: DLA
PROJECT NO.: 08275480
DRAWING NO.: EE001
DATE: AUG 29, 2008

Utah National Guard - RECRUITER STORAGE BUILDING - DRAPER, UTAH

File Name: P:\2008\20080504\1Drawings\Sheet\04EE001.dwg Last Plotted: 2008/08/29 @ 11:19 AM By: pss

LIGHTING FIXTURE SCHEDULE

NOTE TO BIDDERS: COMPLY WITH SECTIONS 16511, 16521, AND 16570 OF THE SPECIFICATIONS.
REFER TO SPECIFICATIONS FOR IMPORTANT TECHNICAL REQUIREMENTS FOR LIGHTING FIXTURES, BALLASTS, AND LAMPS. THE CATALOG NUMBERS LISTED BELOW HAVE BEEN CAREFULLY PREPARED TO ASSIST BIDDERS IN SELECTING PRODUCTS TO ACHIEVE THE DESIGN CONCEPT, HOWEVER, PRIOR TO BIDDING, EACH MANUFACTURER SHALL COMPARE THE CATALOG NUMBERS SHOWN WITH THE DESCRIPTION AND REQUIREMENTS ON THE DRAWINGS, AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. SPECIFICALLY INCLUDED IN THIS EVALUATION SHALL BE THE VERIFYING OF PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS. NO ALLOWANCE OR REDRESS WILL BE ALLOWED FOR DISCREPANCIES THAT WERE NOT REPORTED TO THE ARCHITECT/ENGINEER IN TIME FOR CORRECTION OR CLARIFICATION BEFORE THE BID. THE REPORTING OF ANY AMBIGUITY IS THE RESPONSIBILITY OF THE BIDDER. PROVIDE UNIT PRICES AND FIXTURE BRAND SELECTED FOR ADD/DELETE CHANGES FOR EACH FIXTURE TYPES SHOWN WITHIN 48 BUSINESS HOURS OF THE BID DATE. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY DISQUALIFY THE PRODUCTS AND EMPOWER THE ENGINEER TO DETERMINE FAIR VALUE FOR FIXTURE AND INSTALLATION CHANGES, WITHOUT FURTHER INPUT FROM THE CONTRACTOR OR INSTALLER. SUBMITTAL PACKAGE SHALL INCLUDE LAMP MANUFACTURER AND CATALOG NUMBER ON EACH FIXTURE SHEET. ON ALL PENDANT MOUNTED FIXTURES, PROVIDE A SECOND SET OF PENDANTS, OF A DIFFERENT LENGTH, AS DIRECTED BY THE ARCHITECT/ENGINEER, PROVIDED AND INSTALLED AT NO ADDITIONAL CHARGE. ALL FIXTURES SHALL BE APPROVED BY UL OR ANOTHER ACCEPTABLE TESTING LAB FOR THE PURPOSE INTENDED AND WITH THE LAMP AND BALLAST PROPOSED. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES. UNIVERSAL VOLTAGE (120/277) BALLASTS REQUIRED UNLESS NOTED OTHERWISE. DIMENSION SEQUENCE = (LENGTH X WIDTH X DEPTH) IN INCHES.

SYMBOL	MARK	FIXTURE CHARACTERISTICS BODY / AIR / MOUNTING / DOOR LENS/LOUVER/REFLECTOR/OTHER	LAMP	WATTS	VOLTS	MANUFACTURER	CATALOG NUMBER	NOTES
	OC	WALL PACK: ADJUSTABLE CUT OFF; FULL PERIMETER GASKETING: WET LOCATION; STAINLESS STEEL HINGES AND LATCHES; PROJECTING LENS; HPF BALLAST; SEE ELEVATION FOR MOUNTING HEIGHT, COLOR AS SPECIFIED BY ARCHITECT.						
	OC-26	100 PSMH, RECESSED J BOX. WIDE THROW, SQUARE, DECORATIVE	100PSMH	130W	277/120V	MCPHILBEN	101-WT-100MH-XX	
						LSI	GBWS-3-100MH-F-MT-XX-NO	
						LITHONIA	WST 100M WT TB	
						LUMARK	MHIP-T-100-MT-XX	
	SA	GENERAL PURPOSE INDUSTRIAL: WHITE ENAMEL, APERTURED REFLECTOR; PROGRAM START ELECTRONIC BALLASTS; T8 LAMPS; ONE BALLAST PER FIXTURE WHERE POSSIBLE; UNLESS TWO LEVEL SWITCHING IS SHOWN ON THE PLANS; STEM MOUNTED WITH TONG HANGERS.						
	SA-1	4', 2-LAMP.	2-F32T8 RE835	65W	277/120V	LITHONIA	EJA232-MVOLT-TUBRHP-THUN	
						LIGHTOLIER	KWA232-U-SOP	
						METALUX	IA-232-UNV-PROGRAM START	
						HUBBELL	IG142R-PP10-UPS	
						COLUMBIA	CSR4-232U-EB8120/277 PROG-CSTH	
						DAYBRITE	IA232-UNV-1/2-EB-SPEC	

PANEL "S1HA"

VOLTS/PHASE/WIRE: 277/480 V, 3 PH 4 WIRE | PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON | MAIN SIZE & TYPE: 100 AMPERE MAIN CB | LOCATION: | CABINET: | NOTES:

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS

CKT NO	OCP AMP	OCP POLE	LOAD (kVA) LTG	LOAD (kVA) CO	LOAD (kVA) PWR	DESCRIPTION	LCL kVA	PHASE LOAD A	PHASE LOAD B	PHASE LOAD C	LCL kVA	DESCRIPTION	LOAD (kVA) LTG	LOAD (kVA) CO	LOAD (kVA) PWR	OCP AMP	OCP POLE	CKT NO
1	20	1	0.4			EXTERIOR LIGHTING	0.5	0.4			0.0	SPARE				20	1	2
3	20	1	0.3			STORAGE BUILDING LTG	0.4		0.3		0.0	SPARE				20	1	4
5	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	6
7	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	8
9	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	10
11	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	12
13	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	14
15	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	16
17	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	18
19	-	1				BLANK	0.0	0.0			0.0	SPARE				20	1	20
21	-	1				BLANK	0.0		0.0		0.0	SPARE				20	1	22
23	-	1				BLANK	0.0			0.0	0.0	SPARE				20	1	24
25	-	1				BLANK	0.0	1.2			1.2	S1LA	0.0	1.2	0.0	50	3	26
27	-	1				BLANK	0.0		2.1		2.2	-----	0.5	1.6	0.0	-	-	28
29	-	1				BLANK	0.0			1.6	1.6	-----	0.0	1.6	0.0	-	-	30
TOTALS:						CONNECTED kVA PER PHASE		2	2	2		CONNECTED TOTAL kVA				6		
						CONNECTED AMPS PER PHASE		6	9	6		CONNECTED AVERAGE AMPS PER PHASE				7		

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING 1kVA @125% = 2 kVA | ALL OTHER LOADS @100% = 0 kVA | DIVERSIFIED TOTAL kVA = 6
RECEPTACLES 4kVA @100% = 4 kVA | 25% OF LARGEST MOTOR = 0 kVA | AVERAGE AMPS PER PHASE = 7
REMAINDER 0kVA @ 50% = 0 kVA

PANEL "S1LA"

VOLTS/PHASE/WIRE: 120/208 V, 3 PH 4 WIRE | PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON | MAIN SIZE & TYPE: 100 AMPERE MAIN CB | LOCATION: | CABINET: | NOTES:

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS

CKT NO	OCP AMP	OCP POLE	LOAD (kVA) LTG	LOAD (kVA) CO	LOAD (kVA) PWR	DESCRIPTION	LCL kVA	PHASE LOAD A	PHASE LOAD B	PHASE LOAD C	LCL kVA	DESCRIPTION	LOAD (kVA) LTG	LOAD (kVA) CO	LOAD (kVA) PWR	OCP AMP	OCP POLE	CKT NO
1	20	1		0.6		STORAGE BLDG COS	0.6	0.6			0.0	SPARE				20	1	2
3	20	1		0.6		STORAGE BLDG COS	0.6		0.6		0.0	SPARE				20	1	4
5	20	1		0.6		STORAGE BLDG COS	0.6			0.6	0.0	SPARE				20	1	6
7	20	1		0.6		STORAGE BLDG COS	0.6	0.6			0.0	SPARE				20	1	8
9	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	10
11	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	12
13	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	14
15	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	16
17	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	18
19	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	20
21	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	22
23	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	24
25	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	26
27	20	1				SPARE	0.0		1.5		1.6	PANEL 1LA	0.5	1.0	0.0	60	2	28
29	20	1				SPARE	0.0			1.0	1.0	----	0.0	1.0	0.0	-	-	30
TOTALS:						CONNECTED kVA PER PHASE		1	2	2		CONNECTED TOTAL kVA				5		
						CONNECTED AMPS PER PHASE		10	18	13		CONNECTED AVERAGE AMPS PER PHASE				14		

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING 1kVA @125% = 1 kVA | ALL OTHER LOADS @100% = 0 kVA | DIVERSIFIED TOTAL kVA = 5
RECEPTACLES 4kVA @100% = 4 kVA | 25% OF LARGEST MOTOR = 0 kVA | AVERAGE AMPS PER PHASE = 14
REMAINDER 0kVA @ 50% = 0 kVA

STANDARD WIRING DEVICE SCHEDULE

Note to Bidders: Comply with Section 262726 of the specifications. The catalog numbers listed below have been carefully prepared with the assistance of the manufacturer's representatives with the objective of assisting the bidders in determining the quality and ratings of the wiring device specified; however, the catalog numbers may not be complete or accurate. In addition, the color of the wiring device is not intended to be determined by the catalog numbers listed below, but shall be selected by the Architect as indicated in the specification. Each manufacturer prior to bidding shall compare catalog numbers shown with the description and shall notify the Architect/Engineer of any discrepancies.

NEMA	DESCRIPTION	CATALOG NUMBERS
NEMA 5-20R	20A, 125V 2 pole 3 wire duplex grounding receptacles. Nylon or Lexan Faces. Back and side wired. Comply with FS W-C-596 and UL 498.	Bryant 5352 Hubbell CR5352 Leviton 5352 P&S 5352
NEMA 5-20R GFCI	20A, 125V 2 pole 3 wire duplex feed thru GFCI receptacles with indicator light. Nylon or Lexan decorator faces. Back and side wired. Internal components shall comply with FS W-C-596 where applicable. Comply with UL 498 and UL 493.	Bryant GFR53FT Hubbell GF5352 Leviton 6898 P&S 2091 S
NEMA 5-20R Waterproof (Weatherproof in use)	20A, 125V 2 pole 3 wire duplex grounding receptacles. Nylon or Lexan Faces. Back and side wired. Comply with FS W-C-596 and UL 498. Fully gasketed weatherproof while in use enclosure.	Hubbell CR5352/5051-0
20A Single Pole	20A single pole 125V-277V standard toggle switch labeled as complying UL standard 20 and with Federal Specification W-S-896. Provide Nylon or Lexan face, back and side wired. Rated 1 HP 120V.	Hubbell CS1221 Leviton 1221 P & S 521 Bryant 4901

PANEL "1LA" (EXISTING STORAGE BUILDING)

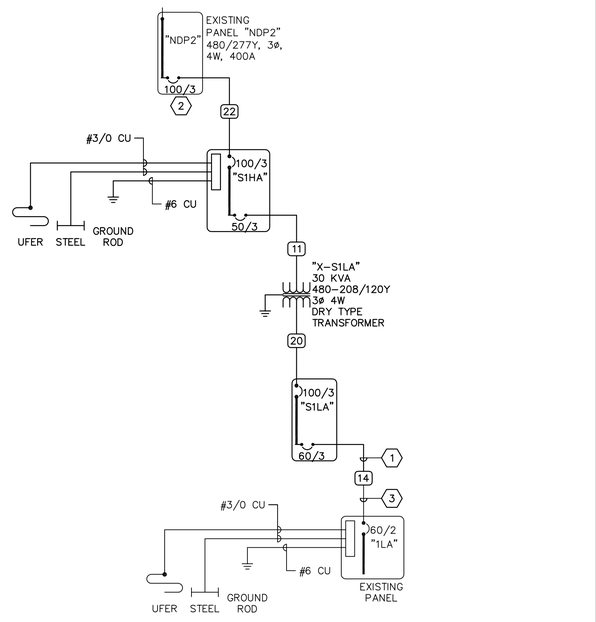
VOLTS/PHASE/WIRE: 120/208 V, 1 PH 3 WIRE | PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON | MAIN SIZE & TYPE: 60 AMPERE MAIN BKR | LOCATION: | CABINET: SURFACE | NOTES: (4)

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, SUBFEED LUGS, SERVICE ENTRANCE RATED

CKT NO	OCP AMP	OCP POLE	LOAD (kVA) LTG	LOAD (kVA) CO	LOAD (kVA) PWR	DESCRIPTION	LCL kVA	PHASE LOAD A	PHASE LOAD B	LCL kVA	DESCRIPTION	LOAD (kVA) LTG	LOAD (kVA) CO	LOAD (kVA) PWR	OCP AMP	OCP POLE	CKT NO
1	40	2				GENERATOR FEED	0.0	0.8		0.8	RECEPTACLES		0.8		20	1	2
3	-	-				----	0.0		0.8	0.8	RECEPTACLES		0.8		20	1	4
5	20	1		0.2		EAST SIDE EXTER CO	0.2	0.7		0.6	LIGHTING	0.5			20	1	6
7	20	1		0.2		WEST SIDE EXTER CO	0.2		0.2	0.0	SPARE				20	1	8
9	20	1				SPARE	0.0	0.0		0.0	SPARE				20	1	10
11	20	1				SPARE	0.0		0.0	0.0	SPARE				20	1	12
13	20	1				SPARE	0.0	0.0		0.0	SPARE				20	1	14
15	20	1				SPARE	0.0		0.0	0.0	SPARE				20	1	16
TOTALS:						kVA PER PHASE		2	1		CONNECTED TOTAL kVA				2.5		
						AMPS PER PHASE		13	8		CONNECTED AVERAGE AMPS PER PHASE				12		

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING 1kVA @125% = 1 kVA | ALL OTHER LOADS @100% = 0 kVA | DIVERSIFIED TOTAL kVA = 3
RECEPTACLES 2kVA @100% = 2 kVA | 25% OF LARGEST MOTOR = 0 kVA | AVERAGE AMPS PER PHASE = 13
REMAINDER 0kVA @ 50% = 0 kVA



L10 ONE-LINE DIAGRAM
NO SCALE

CONDUCTOR AND CONDUIT SCHEDULE

(**) SCHEDULE NUMBER
SUBSCRIPT (NOTE 5) (E.G.) (5) IG

SYM	AMP	CONDUIT SIZE	CONDUCTOR(NOTE 1) QTY	SIZE	G	IG	SE	NOTES
1	20	.75	2	12	12	12	8	2
2	20	.75	3	12	12	12	8	2,3
3	20	.75	4	12	12	12	8	2,3
4	30	.75	2	10	10	10	8	2
5	30	.75	3	10	10	10	8	2
6	30	.75	4	10	10	10	8	2
7	40	1	2	8	10	8	6	2
8	40	1	3	8	10	8	6	2
9	40	1	4	8	10	8	6	2
10	55	1	2	6	10	8	4	2
11	55	1	3	6	10	8	4	2
12	55	1.25	4	6	10	8	4	2
13	70	1	2	4	8	4	2	2
14	70	1.25	3	4	8	4	2	2
15	70	1.25	4	4	8	4	2	2
16	85	1.25	2	3	8	3	2	2
17	85	1.25	3	3	8	3	2	2
18	85	1.25	4	3	8	3	2	2
19	95	1.25	3	2	8	2	2	2
20	95	1.50	4	2	8	2	2	2
21	130	1.50	3	1	6	2	2	2
22	130	1.50	4	1	6	2	2	2
23	150	2	3	1/0	6	2	1/0	2
24	150	2	4	1/0	6	2	1/0	2
25	175	2	3	2/0	6	2	2/0	2
26	175	2	4	2/0	6	2	2/0	2
27	200	2	3	3/0	6	2	2/0	2
28	200	2.50	4	3/0	6	2	2/0	2
29	230	2.50	3	4/0	4	2	2/0	2
30	230	2.50	4	4/0	4	2	2/0	2
31	255	2.50	3	250	4	1	2/0	2
32	255	2.50	4	250	4	1	2/0	2
33	310	3	3	350	3	1/0	3/0	2
34	310	3	4	350	3	1/0	3/0	2
35	380	3.50	3	500	3	3/0	3/0	2
36	380	4	4	500	3	3/0	3/0	2
37	400	2 EA 2	3	3/0	3	3/0	3/0	2
38	400	2 EA 2.50	4	3/0	3	3/0	3/0	2
39	510	2 EA 2.50	3	250	1	4/0	3/0	2
40	510	2 EA 3	4	250	1	4/0	3/0	2
41	620	2 EA 3	3	350	1/0	4/0	3/0	2,4
42	620	2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
44	760	2 EA 4	4	500	1/0	4/0	3/0	2,4
45	855	3 EA 3	3	300	2/0	4/0	3/0	2,4
46	855	3 EA 3	4	300	2/0	4/0	3/0	2,4
47	1000	3 EA 3.50	3	400	2/0	4/0	3/0	4
48	1000	3 EA 3.50	4	400	2/0	4/0	3/0	4
49	1140	3 EA 4	3	500	3/0	4/0	3/0	4
50	1140	3 EA 4	4	500	3/0	4/0	3/0	4
51	1240	4 EA 3	3	350	3/0	4/0	3/0	4
52	1240	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	5 EA 3.50	4	400	4/0	4/0	4/0	4
54	2010	6 EA 3.50	4	400	250	250	250	4
55	2660	7 EA 4	4	500	350	350	350	4
56	3040	8 EA 4	4	500	500	500	500	4
57	4180	11 EA 4	4	500	500	500	500	4
58		5 EA 4						6
59		5						6
60		10 EA 4						6

CONDUCTOR AND CONDUIT SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.
2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
5. WHEN SYMBOL SUBSCRIPT INDICATES "IG", INCLUDE "IG" OR INSULATED GROUND CONDUCTOR SCHEDULED ALONG WITH GROUND OR EQUIPMENT GROUND CONDUCTOR. WHEN SYMBOL SUBSCRIPT INDICATES "SE", SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEMS.
6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

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GENERAL SHEET NOTES

1. PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.
2. REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.
3. ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO SPECIFICATIONS SECTION 16071 FOR REQUIREMENTS.

⬡SHEET KEYNOTES

1. PROVIDE FEEDER WITH 2-INCH CONDUIT MINIMUM.
2. PROVIDE NEW 100A/3P BREAKER IN EXISTING PANEL "NDP2".
3. EXISTING CONDUIT IS STUBBED 2-FEET OUTSIDE BUILDING INTERCEPT EXISTING CONDUIT STUBBED OUTSIDE THE BUILDING TO COMPLETE THE FEEDER AS REQUIRED.
4. PANEL 1LA SHOWN FOR REFERENCE ONLY. PANELBOARD IS EXISTING.

Utah National Guard
RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
DRAPER, UTAH

SHEET TITLE
Schedules & One-Line

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: PSS | CHECKED BY: DLA
PROJECT NO.: 08275480 | DRAWING NO.: EE601
DATE: AUG 29, 2008

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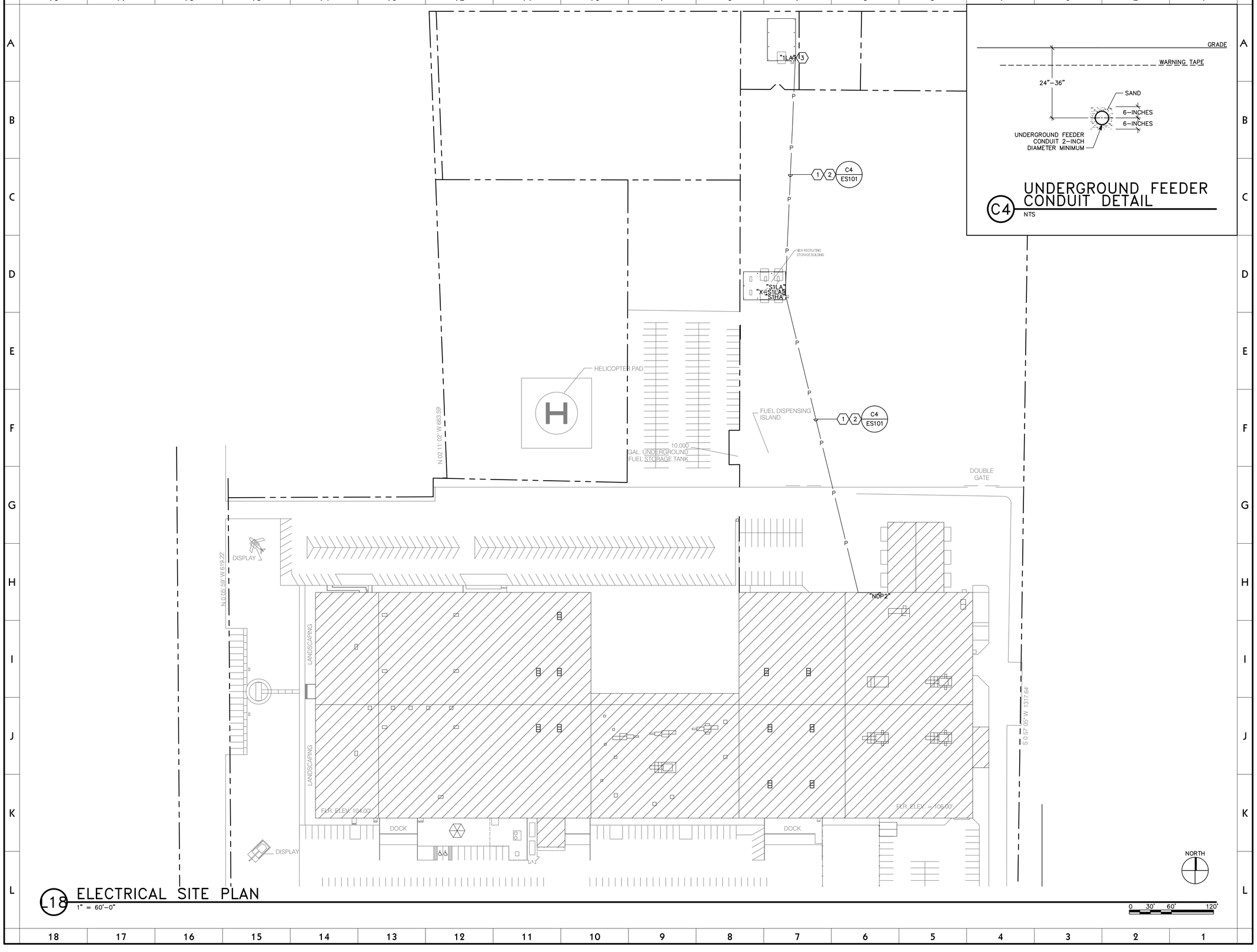

C4 UNDERGROUND FEEDER CONDUIT DETAIL
NTS

L18 ELECTRICAL SITE PLAN
1" = 60'–0"

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SHEET KEYNOTES

1. PROVIDE NEW UNDERGROUND FEEDER. SEE ONE–LINE DIAGRAM. COORDINATE ROUTING OF CONDUITS TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES.
2. CONTRACTOR SHALL IDENTIFY EXISTING UNDERGROUND UTILITIES WITH BLUE STAKES PRIOR TO DIGGING AND SHALL HAND DIG WITHIN 3–FEET OF EXISTING UNDERGROUND UTILITIES.
3. EXISTING CONDUIT IS STUBBED 2–FEET OUTSIDE BUILDING. INTERCEPT EXISTING CONDUIT STUBBED OUTSIDE THE BUILDING TO COMPLETE THE FEEDER AS REQUIRED.

Utah National Guard
RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
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SHEET TITLE
Electrical Site Plan

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY	CHECKED BY
PSS	DLA
PROJECT NO. 08275480	DRAWING NO. ES101
DATE AUG 29, 2008	

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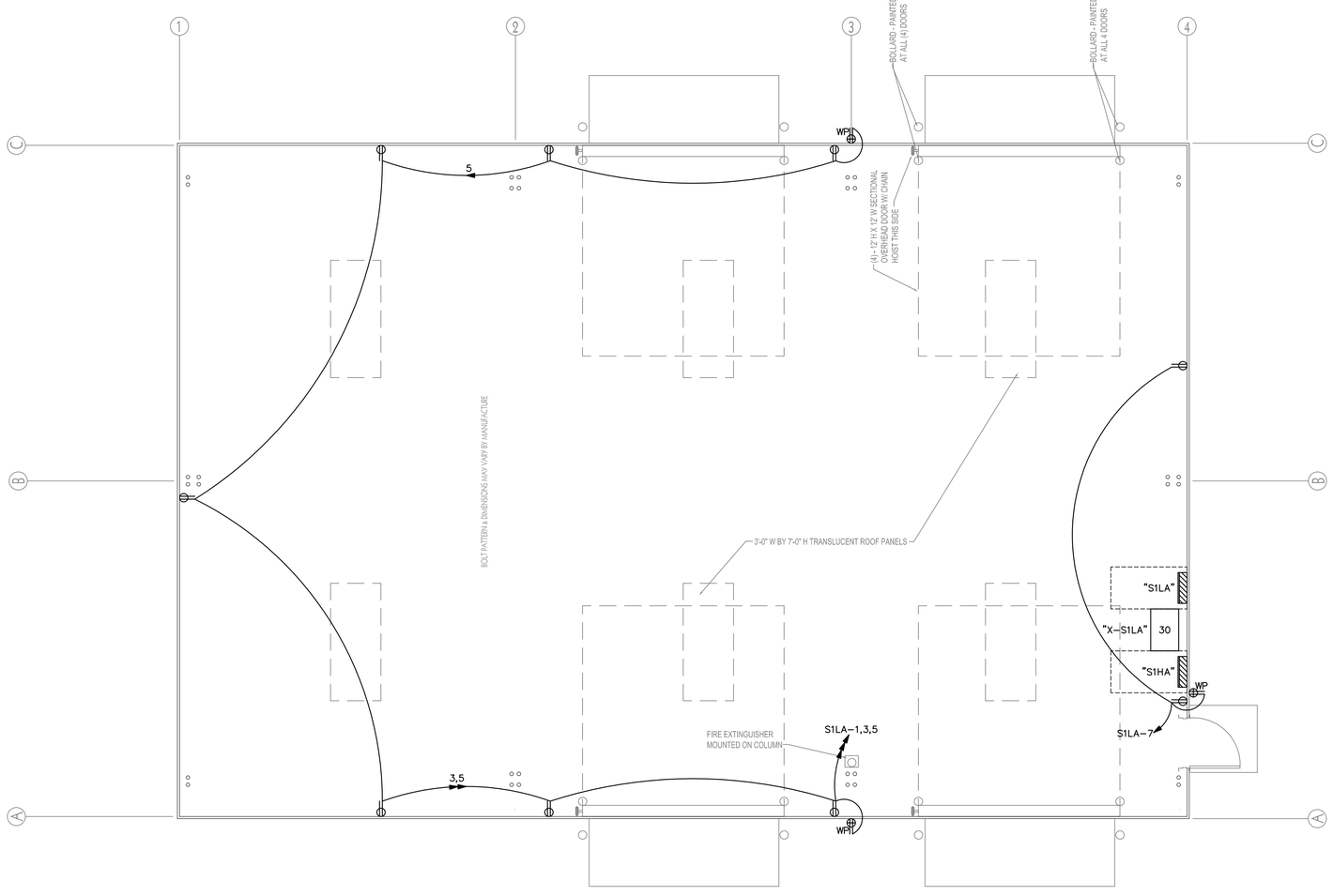

-18 POWER PLAN
1/4" = 1'-0"

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SHEET TITLE
Power Plan

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: PSS
CHECKED BY: DLA
PROJECT NO.: 08275480
DRAWING NO.: EP101
DATE: AUG 29, 2008

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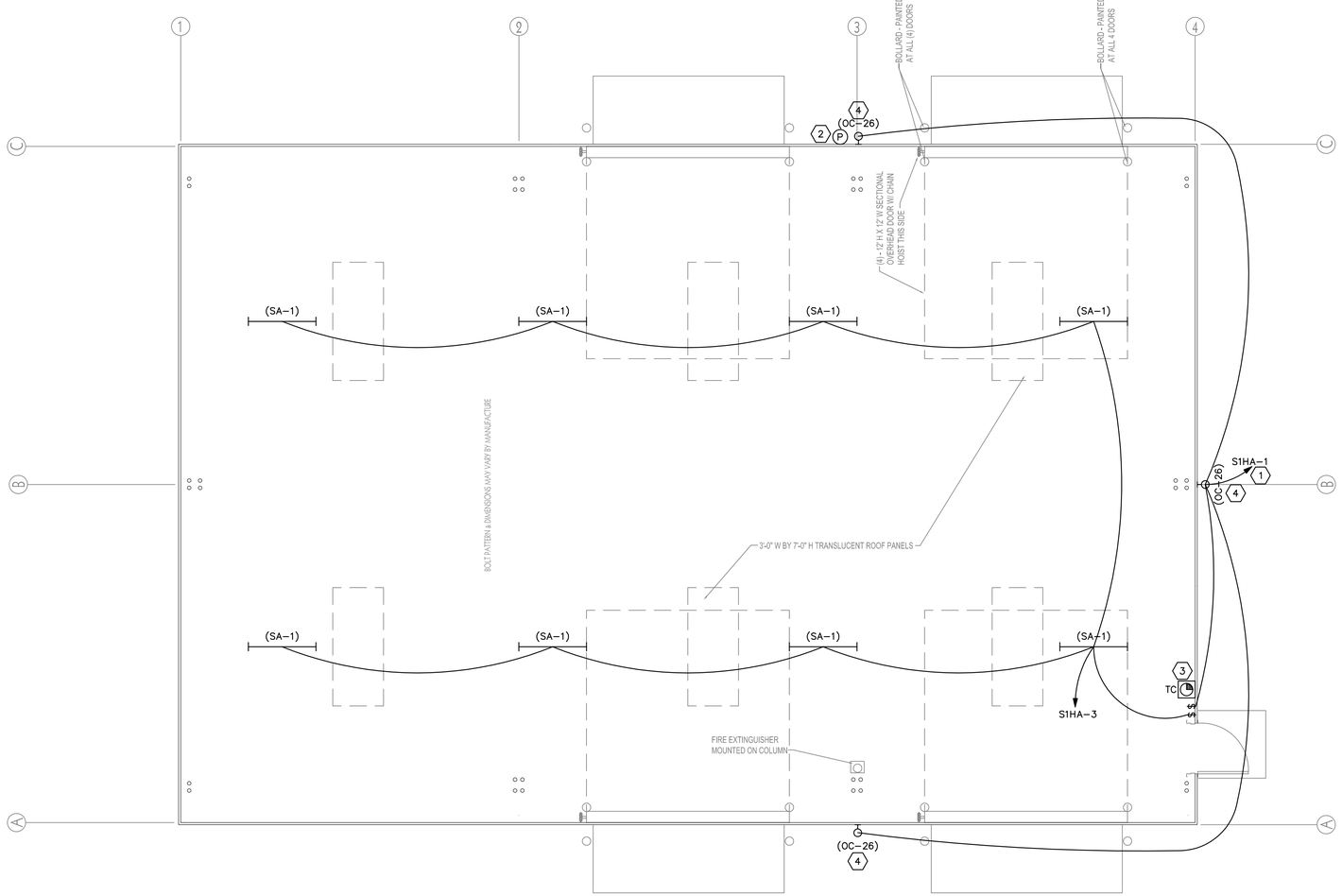

NORTH

0 2' 4' 8'

18 LIGHTING PLAN

1/4" = 1'-0"

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SHEET KEYNOTES

1. CONNECT THROUGH PHOTOCELL AND TIMECLOCK, PHOTOCELL ENABLE, TIMECLOCK OFF.
2. MOUNT PHOTOCELL ON NORTH SIDE OF THE BUILDING. FACE NORTH.
3. PROVIDE DIGITAL TIMECLOCK WITH INTEGRAL RELAYS AND PHOTOCELL INPUT TO OVERRIDE LIGHTS OFF.
4. MOUNT LIGHT FIXTURE DIRECTLY TO STRUCTURE. COORDINATE WITH LOCATION OF BEAMS.

Utah National Guard
RECRUITER STORAGE BUILDING
UTAH NATIONAL GUARD
DRAPER, UTAH

SHEET TITLE
Lighting Plan

REVISIONS	DATE	BY	DESCRIPTION
1			
2			
3			
4			

DRAWN BY: PSS	CHECKED BY: DLA
PROJECT NO.: 08275480	DRAWING NO.: EL101
DATE: AUG 29, 2008	

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